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AUTHOR Green, Thomas F.
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ABSTRACT

The author raises questions in analyses of educational policy issues and suggests possible answers to them. The questions concern the nature of changes in the educational system from a given proposed policy change, the magnitude of such change, and the length of time needed to secure the anticipated magnitude of change. Competency-based education (CBE) is discussed in the context of these changes. The theme is the need for a "rational" connection between education and the world of work or successful living, or, put another way, a "rational" link between allocation of educational benefits and the allocation of non-educational social goods. Different concepts of "rational" are noted. The changing social value of education, with its changing socioeconomic implications, is related to the CBE movement and its potential. (MF)

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COMPETENCY-BASED EDUCATION VIEWED FROM "THE SYSTEM"

by

Thomas F. Green
Cultural Foundations of Education Department
Syracuse University
Syracuse, New York 13210

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Educational Policy Research Center
Syracuse Research Corporation
Merrill Lane, University Heights
Syracuse, New York 13210

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Competency-based education, as these papers clearly reveal, is an interrelated set of proposals. They are interrelated, moreover, in such a way that if CBE were fully implemented and perfected, no feature of the educational system would remain untouched. It does not follow, however, that every part of the system touched by CBE would be changed, nor even that any part of the system would be changed significantly. The crux of the matter lies in the phrase "changed significantly". What constitutes a significant change? Neither policy analysis, nor for that matter, policy decision, require agreement on the answer to that question. Both, however, require some formulation of judgments about a range of different answers.

That CBE, properly perfected, would touch every aspect of the system and change nothing is a claim worth considering not because of any desire to advocate the abandonment of the CBE movement, but in order to prepare the way for three questions that should be, but seldom are, raised in analyses of educational policy issues. Those questions are:

(1) What precisely are the changes in the system that are being proposed in a given policy change?

(2) What is the magnitude of change that can be anticipated under the best of conditions?

(3) Over what period of time must the policy be sustained in order to secure the magnitude of change anticipated?

The remarks that follow are intended to place these papers on competency-based education in the context of these three questions. Nobody, within a few pages, can answer these questions. But it is possible to sketch the kind of answers

that they are capable of receiving.*

Let us distinguish three kinds of goods whose social allocation implicates the educational system.

Educational Benefits	Non-educational Social Goods	Second-order Educational Benefits
knowledge or information	income	certificates
skills	status	diplomas
capacity to apply knowledge	job opportunity	degrees
taste	prestige	licenses
standards of civility		

The educational system distributes the first and the third of these sets of goods, but not the second. I do not mean to suggest that educational goods cannot be secured outside the system. I mean to suggest only that their distribution by the educational system is essential to what we mean by calling it an educational system, even though it may be extraneous to what we mean by calling it a system. (Never mind for the moment that licenses, as Rebell points out, are often awarded by an agency of the State. The fact remains that State licensing agencies often require the possession of a certificate or diploma that is awarded by the system; and besides, insofar as the State agency awards occupational licenses, as opposed to liquor licenses and driver's licenses, it may be regarded as a part of the educational system.)

Now, the presiding theme throughout these papers is the need to forge a more "rational" connection between the allocation of educational benefits and the allocation of non-educational social goods. Put more simply, but less

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* It follows that there are certain assumptions that lie back of this discussion. They are omitted, but can be stated. They include assumptions about the actual behavior of the system, about the structure of interests that it contains, about the nature of policy, about the place of political decision within the policy process, and about the interests of persons served by the system. To make these assumptions explicit would make this paper too long, but making them explicit is crucial to any policy analysis of CBE.

precisely, there is virtually nothing in these papers that does not flow from the single dominant concern to forge a more "rational" connection between education, on the one hand, and the world of work or successful living, on the other hand.

It is worth noting, however, that the concept of a "rational" link in this relation does not mean the same thing throughout these papers. Rebell uses the concept in its legal sense as a "standard of fairness" or as a protective against "capricious and arbitrary" action. In the papers of Pottinger and McClelland, the concept does not exclude this kind of fairness, but the emphasis is more strongly on "efficiency and effectiveness" of the system. The connection sought in CBE may be "fair", "non-arbitrary and non-capricious" in Rebell's sense without being "efficient" or "effective" in Pottinger's sense.

The second point is to observe that a truly "rational" link between the distribution of educational goods by the system and the distribution of non-educational social goods by the society is not desired merely for its own sake. It is desired rather because it is believed that a more "rational" link would be more equitable in its social effects, and more efficient and effective for the system. Thus, in the <u>logic</u> of the CBE package, the central interest is the establishment of more rational allocational behavior. All other issues flow from this one.

From another point of view, it can be said that the dominant <u>social</u> goods being advanced in the CBE policy package* are equity in the distribution of life's chances and efficiency, accessability, and effectiveness of the educational process. These are powerful claims to muster in support of <u>any</u> policy package. Whether CBE, even under the best of conditions would, in fact, advance

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* This is not to deny that there are other goods advanced in these papers. For example, much of David McClelland's discussion is concerned with the promotion of certain <u>educational</u> improvements that would be worthy of consideration quite independently of any of the social goods that might be secured through CBE.

these social goods is a question that I shall discuss later. The point, for the moment, is only to establish the fact that forging a more rational link between the allocation of educational goods and non-educational social goods is the presiding interest in the logic of the CBE policy package.

The same logic is displayed in the concern shown in these papers over the social meaning and the social uses of credentials, certificates, diplomas, and licenses. Their reform enters into the total CBE package for two reasons only. First, because it is believed that such second-order educational goods* (certificates, diplomas, etc.), as things stand, are the "instruments" used to establish the link between the allocation of the other two types of benefits: and secondly, because it is believed that that link is irrational.

These two claims should be distinguished because each is true only within limits, and secondly, because each raises its own policy problems. The point can be approached in the following way. Second-order educational benefits, especially if we include transcripts among them, are used by the system itself in the conduct of its own allocational behavior. That is to say, one thing the system must do is distribute access to its own services and resources. Typically, that function is carried out in relation to the distribution of credentials, certificates, transcripts, and certain kinds of tests. Thus, access to the system itself appears to be an educational good since, like them, it is distributed by the system itself. On the other hand, the actual distribution of access to the system is typically determined by the system through the distribution of second-order educational goods--i.e., certificates, diplomas, credentials, and transcripts. Access to the services and resources of the system, in other words, appears to be an educational good, but it functions

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* I call these "instruments" educational goods because like other educational goods, they are distributed by the system. But they are unlike other educational goods because, although their allocation by the educational system may be essential to our meaning in calling it a "system", it is not essential to our meaning in calling that system educational. Thus, they are "surrogate educational goods" or, as I shall say, second order educational goods.

as a non-educational social good. Thus, the behavior of the educational system itself beautifully illustrates the distributive logic that is generally presupposed in the CBE policy package. It illustrates the claim that non-educational social goods are distributed on the basis of the distribution of second-order educational goods (diplomas, degrees, etc.).

Yet, there is, by no means, a single voice in these papers declaring that that use of certificates, diplomas, and credentials by the system is an irrational link between the awarding of educational benefits and the distribution of non-educational social goods. Indeed, it is one of the central claims of these papers that such a link between these different sets of goods is rational for the system, but irrational outside the system.* Certificates, diplomas, transcripts, and even tests do certify, fairly well, the possession of competencies needed for success within the formal educational system. They do not, however, attest to the possession of competencies needed for success outside the system.

Of course, anyone who has thought about the matter very long has recognized that diplomas, certificates, transcripts, and the like never have constituted validation of the possession of competencies needed for successful performance outside the system. Why does this reality suddenly present problems? The question is vital if we are to understand precisely what changes in the system are proposed by CBE, their magnitude, and the time needed to secure those goods.

The answer to this question can be formulated in a series of brief propositions. The first proposition is that the social value of second-order

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* Consider, for example, Pottinger's observation that devices for social selection used outside the system are defective precisely because both the techniques and standards of assessment are modeled on what is useful in the system and only in the system; and, for precisely that reason, they are not useful outside the system.

educational goods is a curvilinear function of the proportion of each age-cohort who are successful in obtaining those goods. That is, as increasing numbers of each generation are successful in obtaining higher and higher certificates, diplomas, and the like from the system, the social value of those benefits will increase and then decline. In a society where few have completed high school, high-school completion is unlikely to be used as a screening prerequisite for job entry, job advancement, or job security. The social value of such second-order educational goods will be fairly low. In a society where a great many of each generation have secured such certificates, they can be used as a screening device and in all probability will.* The social value of such goods will be fairly high. In a society, however, where every youth secures a high school diploma, the value of merely having one will again fall. Having such a second-order educational benefit will then serve the same discriminating value for access to non-educational social goods as having a set of lungs. The social value of such goods will again be low.

Several quick observations can be added. When the mere having of a diploma no longer discriminates, then it becomes important to discriminate between diplomas. Having a high-school diploma from this or that school or in this or that program can then have discriminating value. The shift of policy attention from the level of educational attainment to the quality of educational achievement is the functional equivalent of reducing the proportion of each age-cohort who secure a particular second-order educational good. Thus, we replace the status differences associated with differential levels of attainment with status differences associated with different kinds of schools and different kinds of programs. There are many policy directions that would accomplish this same objective. CBE is only one of them.

Secondly, from the perspective just outlined, it becomes clear that second-order educational benefits (diplomas, degrees, etc.) have social value

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* Hence the phenomenon that Huff refers to as "job-upgrading".

only because they are relative goods. The primary value of educational benefits, on the other hand, is intrinsic and only secondarily instrumental as a means of securing second-order educational goods. One way of expressing this difference is to observe that educational benefits have increasing marginal utility to the individual, and moreover the marginal increase in their worth to the individual will be greater the more widely such goods are distributed within the society. Thus, if one lived in a society in which few people could read, or in a society in which few people could repair cars, then being able to read or repair cars might have economic value to the individual who has such skills. But there would be few publishers in such a society, little to read, few cars, and even fewer good roads. However, in a society in which nearly everyone can read, there is likely to be more to read, and the economic value of the skill will decline. Its value, to the individual, however, is likely to increase with each increase in his skill and with each increase in the distribution of that skill throughout the society.

On the other hand, second-order educational goods have social value only to the extent that only some have them and some do not. This contrast is one reason why it is vital to distinguish between educational goods and second-order educational benefits. The policy implications of this distinction are connected with the fact that as the purely relative value of second-order educational goods declines, the intrinsic value of educational goods may become more apparent, more salient in the public's attention, and may even receive political support as something in the public's interest to advance.*

In Scandanavia, most notably in Sweden, such a shift in the political formulation of the public's interest in education has already found its way

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* Hence Huff's observation that some features of what O'Toole regards as the effects of underemployment (or overeducation) and what McClelland refers to as self-defining activities may receive increased importance as a result of the wider distribution of educational goods. O'Toole, on the other hand, continues to see these problems as arising from an increased distribution of second-order educational goods.

into the policy process. There, increasingly, educational policy is made to rest less on grounds of its economic worth to the individual and more on its intrinsic worth--as an antidote to boredom, a means of making people's lives more interesting to them, and so forth. If this kind of development is regarded as progressive, then CBE would be regarded as reactionary in its implications. For, as Pottinger points out, the emphasis in CBE is to continue to view educational goods as primarily instrumental.*

All of these observations can be derived from our first claim that there is a curvilinear relation between the social value of second-order educational goods and the proportion of each age-cohort who are successful in obtaining those goods.

The second important proposition about the distributive behavior of the system is that as the social value of securing second-order educational benefits declines, the social liabilities suffered by any individual as a consequence of not securing them will increase. Schooling becomes defensive for the individual; it becomes compulsory in ways that it was not compulsory before. Being a drop-out is not new, but its seriousness for drop-outs is new.

To this proposition we must add the additional observation that in all educational systems in the world, with the possible exception of China and Cuba, the last social group to secure second-order educational benefits at any level of the system is the lower socio-economic class. There are social and personal difficulties peculiar to this group that are implicit in the distributive behavior of the educational system, for their only genuine and realistic incentive to persist in the effort to secure second-order educational goods is that such goods are the means for securing non-educational social goods. The difficulty is that they are the group and the only group that, if successful,

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* See, for example, Pottinger's discussion of "reductionism" and his comments on the need to identify and develop means of assessing competencies of general significance. See also Rebell's remarks about the dangers of an overly rigid application of E.E.O.C. validation standards.

will secure those second-order educational benefits at precisely that time when they have the least worth. I shall refer to this group as "the group of last entry," although a better name, perhaps, would be "the group of last completion."

The irony of this state of affairs lies precisely in the fact that it was created in the pursuit of increased equity. The result, however, has been to render the remaining inequity more severe, more irrational, more unconscionable, and more disastrous to those who suffer from it. As long as second-order educational benefits were secured by a few, and as long as that few benefitted demonstrably and disproportionately in securing non-educational social goods as a consequence, it could be argued that equity requires universal access to second-order educational goods. But as that effort succeeds, in the name of equity, the value of second-order educational benefits declines and the liabilities suffered by those who fail to secure them increases disastrously.

Because of the nature of the system, there are only two possible alternatives for policy that can assist the group of last entry to escape from their dilemma. The first is to develop and implement that pedagogy and that school so powerful that it can increase the rate of learning for the group of last entry sufficient for them to catch up with the more advantaged groups in society and thus do well within the educational system. Such a policy, even if we could implement it, would probably be unsuccessful because the first group to take advantage of such a powerful tool for education would be those who are advantaged; and thus, we could expect them to maintain their advantage.*

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* See, for example, the history of Head Start. It was most successful where it was never evaluated, namely among those who could afford "educational toys", special schools for early childhood, and other advantages for their "preschoolers". A rough examination of the question shows that the dollar volume of such businesses starts to grow rapidly approximately with the announcement of Head Start and continues to expand for about as long as that program continued to receive public attention.

A more rational and finely discriminating set of second-order educational benefits certifying possession of the competencies required for success in the system, would, under the best of conditions, result in extremely modest marginal gains toward equity. Such a direction of effort, moreover, would have to be maintained for a very long time. Under real life conditions of policy decision and political support, such a policy might reasonably be expected to have no effect or possibly some increase of inequity.*

There is, however, another direction that policy might take in the effort to secure significant gains in equity. Recall two propositions established earlier. First, it is fairly generally agreed that the connection between educational benefits and second-order educational benefits is a rational connection as long as we focus on the purposes of the educational system, but that it is an irrational connection to serve the purposes of life outside the system. The not-so-concealed implication of this observation is that the educational system is quite good at certifying those competencies required for success in the system, but not so good at developing or assessing those that are needed elsewhere. The complaint voiced by the CBE movement is the unexceptional claim that the educational system is supposed to equip people to leave it, but that in fact, it is only good at equipping people to stay within it.

The second proposition has been hinted at, but not made explicit. It is simply that no matter what the character of the system, CBE or not, some will do well in it, and some will not. The educational system does not simply use a grading system; it is a grading system. Add to this fact the additional fact that many who do not do well in the system do quite well in their occupations and in other aspects of life; and, conversely, many who do quite well in the formal educational system lack good judgment, are inept in innumerable ways, do poorly in their occupations and lead impoverished lives. It follows

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* For an actual formulation of method and measures specifying the magnitude of gains that can be anticipated, see Raymond Boudon, Education, Opportunity, and Social Inequiality, (Wiley, New York, N. Y. 1974)

that the competencies needed for success in work and in life generally are possessed by many who do not have the competencies to do well in the educational system.

In general, there are three groups of persons who have not been served well by the system: (1) women, (2) so-called "disadvantaged" groups, and (3) those who left schooling at a time when there were fewer educational opportunities than currently exist. If competencies needed to do well in life were the competencies advanced by the system, then some persons in these groups would do better within the system and some who do well in the system would do less well. If that is true, then the social distribution of second-order educational goods would probably be just as inequitable as it is now, but positions in that distribution would be occupied by different persons. This is the central claim of CBE with respect to the value of equity.

CBE cannot advance the claim to produce a distribution of educational or non-educational social goods that is more equitable either in its range or in its modal characteristics. If anything, it would probably produce more inequity.* But, if perfected, it certainly would produce a more rational basis for the distribution of social opportunities of all sorts. The first path of policy is rooted in an attack on meritocracy. It is equalitarian in intent. This second

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* McClelland, I think, is just plain wrong in his claims on this point. Pottinger's view is more interesting. He holds that there is a level of "sufficiency" in the mastery of certain skills or competencies, and that acquisition both above and below that level is dysfunctional. This, if true, would not produce a different "shape" in the social distribution of that competency. It would mean only a redefinition in the ranking. Those at the top in such competencies would join those at the bottom in trailing those at the level of "sufficiency". The job "que" might have the same shape, but different persons would be at the head of it.

Rebell's discussion of the legal aspects of CBE is clearly focused on members of the three groups listed above giving them a different position in the job "que" without significantly changing either its range or its modal features. CBE is not an egalitarian movement.

approach, represented by CBE, is not an attack on meritocracy; it is rather an explicit attempt to perfect the criteria of merit that might make the meritocracy more fair.*

One final observation may be appended in conclusion. There are only three grounds on which unequal distribution of educational benefits and second-order educational benefits can be justified. They are choice, tenacity, and ability. The educational system, in giving an operational definition of the term "ability" will simultaneously give a more precise and also operational definition to what will count as an educational benefit. In the operations of the system, the terms "ability" and "benefit" are correlative. "Ability" will be defined as whatever it is on the basis of which the system distributes its benefits. And "benefits" will be defined as whatever it is that is distributed on the basis of ability.

As definitions, such a move has the logical fault of circularity. But that fact detracts not at all from the claim that such a circularity describes the behavior of the system. For example, if we think of intelligence either as an endowment or as an acquired trait, we may regard its distribution as relevant in determining the appropriate distribution of educational benefits by the system. Intelligence is one component in the definition of ability. But what is intelligence? How shall we define it?

Right now there is a great deal of controversy over attempts of the system to determine the distribution of intelligence by the use of IQ tests. There is rather wide agreement that intelligence tests do not measure intelligence in any large and inclusive sense of the term. Whatever it is that is

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* Here again, to grasp the magnitude of changes implicit in this move as well as the length of time needed for such a policy to have effect, see those sections of Boudon (op. cit.) in which the parameters of his model are changed to reflect the most rigorous meanings of "meritocracy". Here again, the magnitude of the gains in "fairness" are small, over a period of time. Whether they are large enough to be socially significant is a matter that can be debated.

measured by such tests does not correspond precisely to what we ordinarily mean by intelligence. But the use of such measures by the system is often defended on the grounds that they do measure the abilities needed to do well in school. And being able to measure that, it is argued, is no small matter. In such a defense, "ability" (in this case intelligence) is defined as whatever it is on the basis of which the system distributes its benefits—a perfectly reasonable operational definition of one part of ability. But the further assumption is implicit that whatever benefits are distributed by the system can be defined, partly at least, as those that are distributed on the basis of ability.

This logical circularity reflects a social reality. Understanding it is absolutely vital to our understanding of the educational system. It explains, for example, why it is that no system is in serious trouble as long as only one of these terms is opened for redefinition. The system can always provide an operational definition in terms of the other. It also explains why no policy proposal for the system would be truly radical unless it seeks redefinitions of both "ability" and "benefit" simultaneously. Moreover the correlative character of these terms is a fundamental feature of "the inertial guidance" of the system--the cultural and structural mechanisms permitting the system to undergo a change in its course returning shortly to its accustomed ways.

Competency-based education is the only policy package currently on the scene that properly sees the need to act in ways to redefine both of these terms at once. This, again, would permit the system to continue its functional behavior in certain respects unchanged, but in the process, a very different social system would emerge.